

Abstract

5 Enclosed are high refractive index and low birefringence organic/inorganic hybrid materials useful for optical applications. They are prepared from solventless metal aliphatic acryl alkoxides. The metal acryl alkoxides are synthesized from exchanging acryl alcohol with metal alkoxides, and are hydrolyzed into metal oxide nanoparticles and are well dispersed in the acrylate matrix. Then they are polymerized into organic/inorganic hybrid materials containing metal oxide in polyacrylate.